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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,211	07/11/2003	Jeffrey D. Provost	CISCO-7357	4216

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EXAMINER	
BROWN, MICHAEL J	
ART UNIT	PAPER NUMBER
2116	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/618,211	PROVOST, JEFFREY D.	
	Examiner	Art Unit	
	Michael J. Brown	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell(US Patent 6,701,443) further in view of Cai et al.(US Patent 7,103,319).

As to claim 1, Bell discloses a physical layer(see column 4, lines 24-25) for an inline power device(Medium Dependent Interface(MDI), see column 4, lines 25-26) of a network power system(remote powerability system 20, see Fig. 1), the physical layer comprising an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port

when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 2, Bell discloses a power source equipment of a network power system(remote powerability system 20, see Fig. 1), the power source equipment comprising at least one physical layer(see column 4, lines 24-25) including an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 3, Bell discloses the power source equipment further comprising signal processing of the inline power control signal, wherein the signal processing is external to the at least one physical layer(see column 4, lines 39-47).

As to claim 4, Bell discloses a method of inline power(Medium Dependent Interface(MDI), see column 4, lines 25-26) for a network power system(remote powerability system 20, see Fig. 1), the method comprising sourcing an inline power control signal(control circuitry 80, see Fig. 3) from a physical layer(see column 4, lines 24-25), wherein the inline power control signal(response signal, see column 5, line 41) originating from the physical layer is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However Bell fails to disclose the inline power control signal existing from a physical layer.

Cai teaches the inline power control signal existing from a physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 5, Bell discloses an apparatus for inline power(Medium Dependent Interface(MDI), see column 4, lines 25-26) for a network power system(remote powerability system 20, see Fig. 1), the apparatus comprising a physical layer(see column 4, lines 24-25), and means for sourcing an inline power control signal(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power

control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 6, Bell discloses a physical layer(see column 4, lines 24-25) for an inline power device(Medium Dependent Interface(MDI) of a network power system(remote powerability system 20, see Fig. 1), the physical layer comprising an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline

power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 7, Bell discloses a power source equipment(power apparatus 26, see Fig. 3) of a network power system(remote powerability system 20, see Fig. 1), the power source equipment comprising at least one physical layer(see column 4, lines 24-25) including an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 8, Bell discloses the power source equipment further comprising a signal processor configured to process the inline power control signal, wherein the signal processing is external to the at least one physical layer(see column 4, lines 39-47).

As to claim 9, Bell discloses a method of inline power(Medium Dependent Interface(MDI), see column 4, lines 25-26) for a network power system(remote

powerability system 20, see Fig. 1), the method comprising sourcing an inline power control signal(control circuitry 80, see Fig. 3) originating from a physical layer(see column 4, lines 24-25), wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However Bell fails to disclose the inline power control signal existing from a physical layer.

Cai teaches the inline power control signal existing from a physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 10, Bell discloses an apparatus for inline power(Medium Dependent Interface(MDI) for a network power system(remote powerability system 20, see Fig. 1), the apparatus comprising a physical layer(see column 4, lines 24-25), and means for sourcing an inline power control signal(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 11, Bell discloses a network switch for a network power system(remote powerability system 20, see Fig. 1), the switch comprising at least one physical layer(see column 4, lines 24-25) including an inline power control signal source(control circuitry 80, see Fig. 3) originating from the physical layer, wherein the inline power control signal(response signal, see column 5, line 41) is configured to indicate when to apply power to a port when there is no power applied to the port and when to remove power from the port when there is power applied to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 12, Bell discloses the switch further comprising signal processing of the inline power control signal, wherein the signal processing is external to the at least one physical layer(see column 4, lines 39-47).

As to claim 13, Bell discloses a system comprising one or more inline power devices(Medium Dependent Interface(MDI), see column 4, lines 25-26), and one or more powered devices(remote powerability system 20, see Fig. 1) coupled to an inline power device, each of the one or more inline power devices and each of the one or more powered devices having at least one port, each port having a physical layer, the physical layer including an inline power control signal source(control circuitry 80, see Fig. 3) wherein an inline power control signal source(response signal, see column 5, line 41) originating from the physical layer controls application of power to the port(Items 42, 44, 46, and 48, see Fig. 2). However, Bells fails to specifically disclose the inline power source included in the physical layer.

Cai teaches an inline power source included in the physical layer(see column 8, lines 45-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bell and Cai in order to create an inline power source represented at the physical layer. The motivation to do so would be to save space.

As to claim 14, Bell discloses the system wherein the inline power devices are power source equipment(power apparatus 26, see Fig. 3)(see column 4, lines 21-29).

As to claim 15, Bell discloses the system further comprising a signal processor external to the physical layers to process the inline power control signal(see column 4, lines 39-47).

Response to Arguments

2. Applicant's arguments filed 1/16/2007 have been fully considered but they are not persuasive. Applicant argues that Bell's PHY of devices 22 cannot be the inline power control signal source. Examiner agrees with Applicant that Bell does not disclose the teaching of the inline power control signal source included in the physical layer, thus the reliance upon Cai. Cai clearly teaches at column 8, lines 45-46 that power control can reside on any physical layer. Applicant also argues that Cai does not disclose or suggest an inline power source included in a physical layer, further arguing that only the method is implemented on a physical layer. Again, Examiner disagrees because the power control method is implemented on the physical layer, therefore one of ordinary skill in the art would know that the power source is on the physical layer.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Brown whose telephone number is (571)272-5932. The examiner can normally be reached on 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571)272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Brown
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REHANA PERVEEN
SUPERVISORY PATENT EXAMINER
4/11/07